Remarks

Claims 1 - 18 are pending in the application. Claims 1 - 18 were rejected, and reconsideration is requested.

Claim Rejections - 35 U.S.C. 102(b) - U.S. Patent 6,705,141 issued to Jacob et. al.

Claims 1 – 7, 11 – 14, and 18 were rejected under 35 U.S.C. 103(a) as being unpatentable over Jacob. Examiner states that "Jacob et al. teaches opening (shank recess) for holding the key shank in place and having an obstruction for limiting the depth that the handle portion is received in the shank (col. 4 lines 23 – 30)." Claim 1 has been amended to specify, "...a shank recess sized to tightly contain the key shank handle portion [emphasis added].... This feature is supported in the specification on page 4, lines 21 – 24, "In a preferred embodiment, the shank recess 34 has a rectangular dimension which closely approximates that of the key shank handle portion 14 and is preferably sized to tightly contain the key shank handle portion 14 so as to inhibit movement of the key shank 12 relative to the shuttle 18." Further, Claim 1 has been amended to specify "...a transponder recess sized to tightly contain the transponder ..." This feature is supported in the specification at page 5, lines 27 – 30 and continuing on page 6, line 1, "A transponder recess is preferably sized to tightly contain the transponder 57 so as to inhibit movement of the transponder 57 within the recess 64." As a result, in applicants' Claim 1 the orientation of the transponder is set in relationship to the key shank.

In contrast, in Col. 3, lines 56 - 59, Jacob states, "Although other types of movement could also be imagined, this flat key 30 is free to pivot around the pivot axis 33, indicated in broken in FIGS. 1, 3, and 4." Consequently, referring to Jacob's Fig. 4, as flat key 30 pivots around pivot axis 33 the orientation between flat key 30 and transponder(s) 26 in chamber 27 clearly varies.

In the specification, page 1, lines 19-20, applicants state that, "....the orientation of the transponder within the key is important to proper operation of the electronic interlock...." Amended Claim 1 establishes this beneficial feature, and clearly distinguishes Claim 1 from Jacob. Consequently, applicants respectfully request that the rejection of Claim 1 under 35 U.S.C. 103(a) as being unpatentable over Jacob be withdrawn, and that this claim be allowed.

Claim 11 was also rejected under 35 U.S.C. 103(a) as being unpatentable over Jacob. Examiner states that, Jacob et al. teaches "...a transponder recess (col. 5 lines 31 – 32) having a receiving end for receiving the transponder...." In the section referenced by the examiner, Jacob says, "the lower shell 12 has a chamber 27, into which the transponder(s) 26 can be cemented." Jacob's figure 4 illustrates chamber 27 as being closed at both ends. Applicants' transponder recess element of Claim 11 is defined as "a transponder recess having an open [emphasis added] receiving end for receiving the transponder..." This feature is further illustrated in applicants' Fig. 2. An open receiving end is a beneficial and distinguishing feature of applicant's Claim 11 because it creates the option to assembly transponder 20 into transponder recess 28 by merely pressing transponder 20 into the open end of transponder recess 28. This configuration is clearly not anticipated by Jacob. Consequently, applicants assert that Claim 11 is distinct from Jacob and applicants request that that the rejection of Claim 11 under 35 U.S.C. 103(a) as being unpatentable over Jacob be withdrawn, and that this claim be allowed.

Claim 18 was rejected under 35 U.S.C. 103(a) as being unpatentable over Jacob. Applicants' Claim 18 specifies "a transponder recess having an open [emphasis added] receiving end for receiving the transponder..." Examiner states that Jacob teaches "a transponder recess (27) having an open receiving end for receiving the transponder..." Applicants respectfully assert that Jacob does not teach the open receiving end feature. Jacob's figure 4 illustrates a compartment 27 closed at both ends without a description of an open receiving end appearing elsewhere. Furthermore, applicants' Claim 18 defines the shank recess as including "a ledge for receiving the shoulder." This ledge feature is very beneficial as described by applicants at page 5, lines 4-6, "Configuring the shank 12 and shank recess 34 in this manner helps ensure proper positioning of the handle portion 14 of the key shank 12 when the handle portion 14 is inserted into the shank recess 34." In contrast, in Jacob's configuration requires a physical clearance between shaft sidepiece (32, in figure 4) and the surrounding curved portion of lower shell 12 in order for flat key 30 to rotate around axis 33. The combination of the applicants' open recess and the ledge for receiving the transponder clearly distinguishes Claim 18 from Jacob. Consequently, applicants request that that the rejection of Claim 18 under 35 U.S.C. 103(a) as being unpatentable over Jacob be withdrawn, and that this claim be allowed.

Claims 2 -3 and 12 - 13 were also rejected under 35 U.S.C. 103(a) as being unpatentable over Jacob. Examiner states that, "Jacob et al. teaches the transponder (26) having both a cylindrical and rectangular shape (figure 4)." Applicants note that at column 5, lines 31 -32 Jacob states that "lower shell 12 has a chamber 27, into which the transponder(s) 26 can be cemented." In contrast, applicant's claims 2 - 3 and 12 - 13, in conjunction with the limitations of claim 1, provide alternate improved features that accurately position a cylindrical transponder during assembly without requiring cementing. Thus, the applicant's claimed cylindrical transponder in combination with Claims 1 and 11 represents a configuration significantly more beneficial than what is taught by Jacob. Consequently, applicants assert that claims 2 - 3 and 12 - 13 are distinguished from Jacob, and respectfully request that the rejection under 35 U.S.C. 103(a) be withdrawn and the claims allowed.

Claim 5 was also rejected under 35 U.S.C. 103(a) as being unpatentable over Jacob. Examiner states that, "Jacob et al. teaches the terminal end of the transponder recess (27) is closed (figure 4)." Again, applicant's adaptation of the closed configuration, defined by Claim 5 in consideration of amended Claim 1, is defined to achieve a precise, definitive position of the end of the transponder. Jacob's transponder recess (27) is described (col. 5, lines 31 - 32) only as "a chamber 27 into which the transponder(s) 26 can be cemented." No qualification is provided for the precise positioning of the transponder(s) 26 within chamber 27. Consequently, applicants respectfully request that the rejection of Claim 5 under 35 U.S.C. 103(a) as being unpatentable over Jacob be withdrawn, and that Claim 5 be allowed.

Claim 6 was rejected under 35 U.S.C. 103(a) as being unpatentable over Jacob. Examiner states that, "Jacob et al. teaches handle portion (30) of said key shank is substantially rectangular (figure 4)." As with applicants' Claims 2 – 5, the limitation of a rectangular configuration is more precisely defined in Claim 6 than the mere pictorial representation of Jacob. Consequently, applicants' claimed design achieves geometric rigidity not defined by Jacobs pivoting shank. Applicants assert that distinguishes Claim 6 from Jacob and respectfully request that the rejection of Claim 6 under 35 U.S.C. 103(a) as being unpatentable over Jacob be withdrawn, and that Claim 6 be allowed.

Claims 7 and 14 were also rejected under 35 U.S.C. 103(a) as being unpatentable over Jacob. Examiner states that, "Jacob et al. teaches that the handle portion of the key shank is offset from the blade portion of the key shank, forming a shoulder adjacent the handle portion, said shank recess including a ledge for receiving the shoulder (figure 4)." In the previous discussion regarding Claim 18, applicants asserted that Jacob does not disclose "a ledge for receiving the shoulder." Instead, applicants noted that Jacob's design requires a clearance space between its elements that correspond to applicants' claimed elements. Applicants respectfully assert that their ledge distinguishes Claims 7 and 14 from Jacob, and request that this rejection under 35 U.S.C. 103(a) be withdrawn to allow Claims 7 and 14.

As previously noted, Claim 18 was rejected under 35 U.S.C. 103(a) as being unpatentable over Jacob. An explanation the arguments for allowance of Claim 18 over Jacob were presented earlier herein.

<u>Claim Rejections – 35 U.S.C. 103(a) – U.S. Patent 6,705,141 issued to Jacob et. al. in view of U.S. Patent 5,727,408 issued to Mizuno, et al.</u>

Claims 8 and 15 were rejected under 35 U.S.C. 103(a) as being unpatentable over Jacob in view of Mizuno. Examiner states that, "Jacob et al. teaches means for attaching the shank handle to the upper and lower shell forming the shuttle (col. 5 lines 21-30)..." and "Mizuno et al. ...teaches a shank handle (112) having two spaced apart legs and a single shank recess for receiving both legs (figure 9)." Applicants assert that Mizuno's spaced legs engage the signal generating device (114) (see figure 11), whereas applicants' Claims 8 and 15 are defined as having the "shuttle [emphasis added] including a single shank recess for receiving both legs." Applicant's respectfully assert that this is a distinguishing difference, and request that the rejection of Claims 8 and 15 under 35 U.S.C. 103(a) as being unpatentable over Jacob in view of Mizuno be withdrawn, and that Claims 8 and 15 be allowed.

<u>Claim Rejections - 35 U.S.C. 103(a) - U.S. Patent 6,705,141 issued to Jacob et. al. in view of U.S. Patent 4,840,586 issued to Thomas</u>

Claims 9 and 16 were rejected under 35 U.S.C. 103(a) as being unpatentable over Jacob in view of Thomas. Examiner states that, "Jacob et al. teaches a recess (27) for inserting the transponder and the recess is shaped in order to accommodate the transponder (figure 4)..." and

that one skilled in the art would recognize "that the parts are attached or inserted into each other are conventially keyed in order to prevent improper connection as evidenced by Thomas (col. 1 lines 34 – 36)." Applicants note that Thomas's invention pertains to (per its title) a "Keying Apparatus for Connecting a Printed Wiring Assembly to a Backplane Structure." Applicants respectfully assert that this is non-analogous art to a "Vehicle Anti-theft Key with Transponder." Furthermore, the passage in Thomas cited by Examiner reads "...DIN connectors are often 'keyed' to prevent improper or incompatible connection." DIN connector art is even further removed from the art for automobile keys. Consequently, applicants respectfully assert that this reference is not applicable to their invention and request that that the rejection of Claims 9 and 16 under 35 U.S.C. 103(a) as being unpatentable over Jacob in view of Thomas be withdrawn, and that Claims 9 and 16 be allowed.

<u>Claim Rejections – 35 U.S.C. 103(a) – U.S. Patent 6,705,141 issued to Jacob et. al. in view of U.S. Patent 4,963,106 issued to Wendling et al.</u>

Claims 10 and 17 were rejected under 35 U.S.C. 103(a) as being unpatentable over Jacob in view of Wendling. Examiner states that, "Jacob et al. teaches a shuttle formed by an upper shell (11) forming a first planar surface and lower shell (12) forming a second planar surface for holding the key in place (col. 3 lines 37 – 41)" and that "one skilled in the art recognizes that corrugations are conventially used in bonding surfaces together as evidenced by Wendling et al. (col. 2 lines 65 – col. 3 line 5)." Applicants respectfully assert that Wendling's corrugations are not provided for bonding, as evidenced by the passage cited by examiner which states in part, "said bar being corrugated so that opposite faces of the terminal locking bar define said open channels [emphasis added]...." Further, applicants respectfully assert that Wendling in combination with Jacob does not teach matter suggesting that "said first and second surfaces [emphasis added] of the shuttle" be corrugated. Therefore, applicants respectfully request that that the rejection of Claims 10 and 17 under 35 U.S.C. 103(a) as being unpatentable over Jacob in view of Wendling be withdrawn, and that Claims 10 and 17 be allowed.

Conclusion

The applicant has carefully reviewed the cited references and believes the claims have now been placed in a form requiring allowance, and such action is earnestly requested. If the examiner believes that a telephone call would expedite the early disposition of this application, he is respectfully requested to call the undersigned.

In the event this response is not timely filed, Applicants hereby petition for the appropriate extension of time and request that the fee for the extension along with any other fees which may be due with respect to this paper be charged to our Deposit Account No. 12-2355.

Respectfully submitted,

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